Atomic Absorption Spectrophotometer LX600AAS

Email: info@labdex.com **website:** www.labdex.com

Description

Atomic Absorption Spectrophotometer LX600AAS is an integrated flame atomization system. They analyze the concentration of elements in a liquid sample based on energy absorbed from certain wavelength of light. They are equipped with turrets that can hold multiple lamps to reduce downtime between samples or allow for sequential analysis.

Specifications

O2 Enriched Flame	No
Air-C2H2 flame	Yes
Auto sampler	No
Wavelength range	190-900nm
Wavelength accuracy	≤±0.25nm
Wavelength repeatability	≤0.15nm
Light source system	**Lamp position**: Eight lamp position design **Rotation**: Automatically rotating light stand that can be automatic switch and optimize **Performance**: Two lamp positions to support high-performance hollow cathode lamps. Each lamp position can be lighted and preheated optionally

Optical System	**Monochomator**	Single beam, Czerny-Turner design
	Grating	1800 lines/mm
	Blazed wavelength	250nm
	Focal length	277mm
	Spectral bandwidth	0.1nm, 0.2nm, 0.4nm,0.8nm and 1.6nm, 2.6nm (debugging slit) switching automatically
Atomizer	**Flame atomization system**	The single flame atomization system is adopted, and the burner can be adjusted up and down, back and forth, and rotated in multiple dimensions
	Burner	10cm all-titanium burner for air-acetylene flame (optional flame-emitting combustion head)
	Automatic control function	Adopt high-reliability gas flow control system, with automatic control such as automatic ignition/extinguishing. With foot reading function, effectively liberate the hands of analysts

Detection and Data processing system	**Operation software**: Intelligent operation software, support Win7/Win10 and other operating systems **Repeat times**: 1~99 times, automatic calculation of mean value, standard deviation and relative standard deviation **Multi-task functions**: Sequential determination of multi-elements in the same sample **Condition reading**: With model function **Result printing**: Measurement data and final analytical report printout, editing with Excel **Communication port**: Standard RS-232 serial port communication
Function expansion	Hydride vapor generator can be connected for hydride analysis
Voltage	220V 50Hz, average power dissipation 0.3kVA
Packing dimension (L x W x H) and Gross weight	1270 x 750 x 830 mm, 130 kgs

Features

- Designed 8-light position lamp holder is compatible with the light position element memory function of conventional lights, and easily supports 1~4 lights to be preheated at the same time
- Supports the expansion of various functions and accessories such as hydride method, flame emission method, oxygen-enriched air-acetylene high temperature flame method, and flame auto-sampler
- Data processing system: provided with analytical methods – Working curve auto-fitting standard addition method, automatic sensitivity correction, automatic calculation of concentration and content with windows operating system software
- Experiments can be repeated 20 times maximum along with automatic calculation of mean value, standard deviation and relative standard deviation
- Equipped with multi task functions- sequential determination of multi-elements in the same sample, condition reading- with model function and result printing- measured data and final analytical report printout in excel
- AAS analysis is made under windows operating system which is easy-to-use with fast parameter

setting and optimization

- Designed with various safety monitoring and protection system, which insure the flame state in real time, and has the functions of automatic flameout and alarm protection when abnormal air pressure, gas leakage, etc. are abnormal
- Various automatic and intelligent functions such as automatic peak finding setting and scanning automatic setting of slit width and energy, automatic wavelength optimization, and no need to reset when switching wavelengths
- Optional Autosampler, adopting 71-position sub-master plate patented technology, can rapidly remove/install standard solution cup and sample cup respectively. The single cup volume ≥20mL, self-calibrating sampling position, automatic large flow multi-stage Simple cleaning and other functions, high ease of use and flame analysis
- Optional Oxygen-enriched-air-acetylene high-temperature flame is selected, and there is no dangerous gas-N2O, which ensures that the detection limit of high-temperature elements such as aluminum, barium, chromium, molybdenum, and vanadium is effectively improved, and at the same time it brings a jump in analytical sensitivity
- Optional hydride generator for hydrogenation analysis to achieve effective expansion of element types, analytical performance, and detection limits such as arsenic, mercury, and selenium

Applications

- Used for testing the metal element concentration analyze in agriculture, chemical, environmental study, food, mining, and petrochemical, pharmaceutical industry.

71-75 Shelton Street Covent Garden, London WC2H 9JQ UK.

Email: info@labdex.com | Website: www.labdex.com